REMARKS/ARGUMENTS

Claims 7-12 and 17 are presently active in this case. Claim 17 has been added by the present amendment.

In the outstanding office action, claim 7 was objected to for "reciting confusing language;" claims 7-11 were rejected under 35 USC 103(a) as being unpatentable over U.S. patent No. 5,691,793 to Watanabe et al. in view of U.S. patent No. 6,141,066 to Matsushima; and claim 12 was rejected under 35 USC 103(a) as being unpatentable over Watanabe et al. in view of Matsushima and U.S. patent No. 6,317,173 to Jung et al.

Applicants acknowledge with appreciation the courtesy of a telephonic interview on October 22, 2004. Applicants were seeking clarification regarding the examiner's assertion that Watanabe et al. disclose a second wiring layer in view of the office action's silence regarding which element in Watanabe et al. corresponds to the second wiring layer. The examiner explained that the "wiring layer" limitation of claims 7-11 was being broadly interpreted because the term "wiring layer" is believed to be unclear. In view of the broad interpretation of "wiring layer," the examiner asserted that many elements (e.g., element 5) in Figure 4B of Watanabe et al. correspond to the second wiring layer recited in claim 7.

Moreover, regarding claim 7, the official action asserts that "a layer is not considered to be connected in an electrical sense to other elements." Applicants disagree. See for example U.S. patent No. 5,107,355, Attachment A, which provides in column 5 lines 40-53 that wiring layers are conductive and can be connected in an electrical sense to other elements. See also U.S. patent No. 5,373,379, Attachment B, at column 3 lines 46-64. Consequently, Applicants respectfully request that the term "wiring layer" is clear and definite and that the objection to claim 7 be withdrawn.

Briefly recapitulating, the present invention is directed to a wiring configuration for a liquid crystal display suitable for repair. To that end, the present invention (illustrated by

way of the non-limiting example of Fig. 11) provides a first wiring layer 73 connected to an auxiliary capacity electrodes 66, a second wiring layer 74 connected to a switching element 68 and the first wiring layer 73, and a third wiring layer 76 connected to an upper electrode 75 connected to the pixel electrode and the switching element 68. The first wiring layer 73 is formed on a layer closer to the lower side of the array substrate 100 than the second wiring layer 74 and the second wiring layer 74 is formed on a layer closer to the upper side of the array substrate 100 than the first wiring layer 73.

The above described configuration enables a short-circuit defect between the auxiliary capacity electrode and an auxiliary capacity feeder to be corrected prior to forming a cell by irradiating a laser beam on the upper side of the array substrate in order to cut the second wiring layer. If a short circuit is detected after formation of the cell, a laser can be applied to the lower side of the array substrate to cut the first wiring layer. See page 12 lines 19-28 of the Specification.

The official action concedes that Watanabe et al. do not teach a wiring configuration wherein a first wiring layer is formed on a layer closer to the lower side of an array substrate than a second wiring layer and the second wiring layer is formed on a layer closer to the upper side of the array substrate than the first wiring layer. Consequently, the device disclosed by Watanabe et al. cannot enable a short-circuit defect between an auxiliary capacity electrode and an auxiliary capacity feeder to be corrected prior to forming a cell by irradiating a laser beam on the upper side of an array substrate in order to cut a second wiring layer. Furthermore, in the event of a short circuit being detected after formation of the cell, Watanabe et al. do not enable a laser to be applied to the lower side of the array substrate to cut a first wiring layer.

The official action asserts that Matsushima remedies the admitted deficiency of Watanabe et al. Applicants respectfully traverse. First, Applicants respectfully point out that Matsushima neither discloses nor suggests any wiring structure for repair as defined by claim 7. Matsushima merely discloses the structure of an auxiliary capacitor, but does not teach or suggest how to configure wiring layers such that repairs can be readily provided as disclosed and claimed by Applicants.

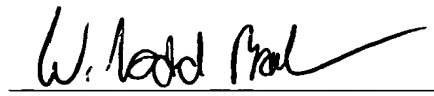
For the foregoing reasons, Watanabe et al. are not believed to anticipate or render obvious the subject matter defined by claim 7 when considered alone or in combination with Matsushima. Claims 8-12 are believed to be allowable for at least the same reasons that claim 7 is believed to be allowable.

Newly added claim 17 depends from claim 7 and further defines that the second and third wiring layers are connected to the source of the respective switching elements. As clarified during the telephone interview regarding Watanabe et al., it is the Office's position that signal line 5 corresponds to the second wiring layer defined by claim 7. However, Applicants point out that signal line 5 connects to the drain of the switching element 3 in Watanabe et al. and not the source. Matsushima does not remedy this deficiency. Hence, Watanabe et al. are not believed to anticipate or render obvious the subject matter defined by claim 17 when considered alone or in combination with Matsushima.

Consequently, no other issues are believed to be outstanding and hence the application is believed to be in condition for allowance. An early and favorable action is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Eckhard H. Kuesters
Attorney of Record
Registration No. 28,870

W. Todd Baker
Registration No. 45,265

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)

I:\ATTY\WTB\0039\197689US\AMENDMENT 26 OCT 2004.DOC